



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|--------------------------------|---------------------|------------------|
| 10/597,385 | 07/24/2006 | Erik Gosuinus Petrus Schuijers | NL040085 | 1288 |

24737 7590 12/10/2008
PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

| |
|----------|
| EXAMINER |
|----------|

OPSASNICK, MICHAEL N

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2626

| | |
|-----------|---------------|
| MAIL DATE | DELIVERY MODE |
|-----------|---------------|

12/10/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/597,385

Applicant(s)SCHUIJERS, ERIK GOSUINUS
PETRUS**Examiner**

MICHAEL N. OPSASNICK

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2626

DETAILED ACTION

Specification

1. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Art Unit: 2626

2. The abstract of the disclosure is objected to because the abstract needs to be submitted on a separate page, without extraneous information. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodwin (US2003/0093282) in view of Malvar (6496795).

As per claims 1,2,26,27, Goodwin (US2003/0093282) teaches a decoder comprising means for recovering a plurality of first spectral coefficients from a received signal, the first spectral coefficients comprising the products of first transform means; inverse transform means for transforming said first spectral coefficients into one or more time domain signal components; second transform means for transforming said one or more time domain signal components into a plurality of second spectral coefficients (as inverse MDCT from a decoder – fig 1, subblock 24 and MDCT,OLA synthesis window - fig. 1, subblock 28), the decoder further comprising means for processing one or more of said first spectral coefficients in conjunction with a respective

Art Unit: 2626

second spectral coefficient (as second set of coefficients in the MDCT OLA calculation – Fig. 1, subblock 28);

As per claims 1,2,26,27, Goodwin (US2003/0093282) does not explicitly teach wherein, the modulation of said second transform means is orthogonal to the modulation of said first transform means at corresponding modulation frequencies, however, Malvar (6496795) teaches orthogonal functions (col. 8 lines 5-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the transform of Goodwin to be an orthogonal type function because it would advantageously provide more efficiency in localized frequency decomposition (Malvar (6496795), col. 8 lines 50-55).

As per claim 3, the combination of Goodwin (US2003/0093282) in view of Malvar (6496795) teaches a decoder as claimed in claim 2, wherein said first spectral coefficients comprise the output of a critically sampled forward frequency transform, said critically sampled forward frequency transform employing a 50% overlap in data samples to be transformed (Goodwin (US2003/0093282), as overlap add function which can include 50%, para0085).

As per claims 4,5,25, the combination of Goodwin (US2003/0093282) in view of Malvar (6496795) teaches a decoder as claimed in claim 2, wherein one of said first forward frequency transform and said second forward frequency transform comprises the Modified Discrete Cosine Transform (MDCT), the other comprising the Modified Discrete Sine Transform (MDST), and the inverse as well (Malvar (6496795), MDCT – col. 8 lines 45-55 - modified sin/cos function).

Art Unit: 2626

As per claim 6, the combination of Goodwin (US2003/0093282) in view of Malvar (6496795) teaches a decoder as claimed in claim 2, wherein one or more windowing and overlap-add operations are performed on said time domain signal components before said one or more second forward frequency transforms (Goodwin (US2003/0093282)), as OLA performed before the DFT – fig. 1, subblocks 26-28-30).

As per claims 7-10, the combination of Goodwin (US2003/0093282) in view of Malvar (6496795) teaches means for delaying said first spectral coefficients so that each first spectral coefficient is synchronized with the respective corresponding second spectral coefficient, as well as aliasing reduction of first and second spectral coefficients (Goodwin (US2003/0093282)), as offsetting aliasing – pg 6, para 0083-0085; as well as well known butterfly techniques in FFT – page 7, para 0088-0089)

As per claims 11, 12,16,19, the combination of Goodwin (US2003/0093282) in view of Malvar (6496795) teaches wherein each first spectral coefficient and respective second spectral coefficient together comprise a complex-valued spectral coefficient, the decoder further including means for performing one or more complex-valued inverse frequency transforms on said complex-valued spectral coefficients to produce a plurality of data samples; means for applying one or more types of window functions to said data samples to produce a plurality of windowed data samples; and means for constructing an output signal from said windowed data samples, as well as on a granule level (Goodwin (US2003/0093282)), as complex inverse transform – page 6, para 0078-0082)

As per claims 13,17, the combination of Goodwin (US2003/0093282) in view of Malvar (6496795) teaches a decoder as claimed in claim 11, wherein said output signal constructing

Art Unit: 2626

means applies one or more overlap-add operations to said windowed data samples to produce said output signal (Goodwin (US2003/0093282), overlap add – page 6, para 0085).

As per claim 14, the combination of Goodwin (US2003/0093282) in view of Malvar (6496795) teaches a decoder as claimed in claim 11, wherein, in respect of at least said first type of window function, said window function application means is arranged to apply a single window function to all data samples produced in respect of a respective set of complex-valued spectral coefficients. (Goodwin (US2003/0093282) as analysis windows – fig. 1, subblock 28,30)

As per claims 15,18, the combination of Goodwin (US2003/0093282) in view of Malvar (6496795) teaches a decoder as claimed in claim 11, wherein said at least first type of window function includes length adjusted versions of MPEG-1 layer III type 0, type 1 and type 3 window functions (Goodwin (US2003/0093282), page 1, para 0008)

As per claim 20,24, the combination of Goodwin (US2003/0093282) in view of Malvar (6496795) teaches a decoder as claimed in claim 19, wherein said output signal constructing means comprises a complex exponential modulated synthesis filterbank, of which the real-valued output components comprise said output signal (Goodwin, page 7, para 0087-0089).

As per claim 21,22, the combination of Goodwin (US2003/0093282) in view of Malvar (6496795) teaches odd time and odd frequency modulation (Goodwin (US2003/0093282), paragraphs 0061,0070,0083).

As per claim 23, the combination of Goodwin (US2003/0093282) in view of Malvar (6496795) teaches the disclosed equations (Goodwin (US2003/0093282), page 9, para 0017).

Art Unit: 2626

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please see related art listed on the PTO-892 form.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (571)272-7623, who is available Tuesday-Thursday, 9am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Richemond Dorvil, can be reached at (571)272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Michael N. Opsasnick/
Primary Examiner, Art Unit 2626
12/7/08